Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of encoding video content, the method comprising:

segmenting the video content into video content portions;

assigning a predefined model to each video content portion; and

routing each video content portion to one of a plurality of encoders based on the model associated with each video content portion.

2. (Original) The method of claim 1, wherein the video content portions are video segments.

3. (Original) The method of claim 1, wherein the video content portions are video subsegments.

4. (Original) The method of claim 1, wherein the video content portions are video regions of interest.

5. (Original) The method of claim 1, wherein the plurality of encoders includes a generic model encoder.

6. (Original) The method of claim 5, wherein the predefined model assigned to each video content portion is chosen from a plurality of predefined video content models.

7. (Original) The method of claim 6, wherein one of the plurality of predefined video content models includes a generic video content model.

8. (Original) The method of claim 7, wherein assigning a predefined model to each video content portion further comprises assigning the generic video content model to a video content portion if none of the other models from the plurality of predefined video content models is assigned to the video content portion.

9. (Currently Amended) A method of encoding video content, the method comprising:

extracting video portions from video content;

identifying video subsegments and regions of interest within the video portions;

assigning a predefined encoder model to each video portion according to a characteristic of the video portion, the predefined encoder model being chosen from a plurality of predefined encoder models or a generic encoder model;

encoding video portions associated with the generic encoder model with a generic encoder; and

encoding video portions associated with the plurality of predefined encoder models with [[a]] an encoder chosen from a plurality of encoders, each of the plurality of encoders being associated with one of the plurality of predefined encoder models.

10. (Original) The method of claim 9, further comprising:

producing descriptors associated with the video portions of the video content; and

producing descriptors associated with the video subsegments and regions of interest.

11. (Original) The method of claim 10, further comprising:

encoding the descriptors associated with the video portions, video subsegments and regions of interest.

12. (Original) The method of claim 11, wherein the descriptors associated with the video portions, subsegments and regions of interest are used to determine whether a generic encoder or an encoder from the plurality of encoders was used to encode the video content portions.

13. (Currently Amended) A method of encoding video content, the method comprising:

segmenting the video content into video content portions;

if a video content portion relates to one of a plurality of predefined encoder models, assigning the video content portion to a related, predefined encoder model chosen from the plurality of predefined encoder models;

if a video content portion does not relate to one of the plurality of predefined encoder models, assigning the video content portion to a generic encoder model;

encoding the video content portions associated with the generic encoder model using a generic encoder; and

encoding the video content portions associated with one of the predefined encoder models with an encoder from a plurality of encoders.

14. (Currently Amended) The method of claim 13, wherein each encoder from the plurality of encoders is associated with one of the predefined encoder models of the plurality of predefined encoder models.

15. (Currently Amended) A method of encoding video content divided into a plurality of portions, each portion being associated with either a generic encoder model or [[a]] an encoder model chosen from a plurality of predefined encoder models, the method comprising:

routing each portion associated with the generic encoder model to a generic encoder; and

routing each portion associated with [[a]] an encoder model of the plurality of predefined encoder models to an encoder associated with the chosen encoder model.

16. (Currently Amended) The method of claim 15, wherein each encoder from the plurality of encoders is optimized for each predefined encoder model of the plurality of encoder models.

17. (Currently Amended) The method of claim 15, further comprising, before routing each portion to either a generic encoder or an encoder from the plurality of predefined encoders:

producing descriptors associated with the content of each portion; and

using the descriptors to determine whether a generic encoder model is associated with each portion.

18. (Currently Amended) A method of producing a bitstream coded according to video content, the method comprising:

extracting a plurality of portions from the video content;

associating each portion of the plurality of portions to either a generic encoder model or a predefined encoder model chosen from a plurality of predefined encoder models;

routing each portion associated with a generic encoder model to a generic encoder; and

routing each portion associated with [[a]] an encoder model of the plurality of predefined encoder models to one of a plurality of encoders, wherein each encoder of the plurality of encoders is associated with one of the predefined encoder models.

19. (Original) The method of claim 18, further comprising:

multiplexing each portion and transmitting each portion in a bitstream.

20. (Original) The method of claim 18, further comprising:

locating subsegments and regions of interest in the extracted portions.

21. (Currently Amended) A method of encoding a bitstream using a plurality of encoders, the method comprising:

extracting segments from video content;

mapping each extracted segment to a predefined encoder model; and

routing the extracted and mapped segments to one of the plurality of encoders based on the ~~mapped segments~~ mapping to the respective predefined encoder model.

22. (Original) The method of encoding of claim 21, further comprising:

after extracting the segments from the video content, locating subsegments and regions of interest in the extracted segments.

23-26. (Canceled)

27. (Currently Amended) A coded bitstream having portions of the bitstream encoded using different encoders according to encoder models associated with [[the]] a subject matter of each portion of the bitstream, the coded bitstream encoded according to the method of claim 1.

28. (Currently Amended) A coded bitstream having portions of the bitstream encoded using different encoders according to encoder models associated with [[the]] a subject matter of each portion of the bitstream, the coded bitstream encoded according to the method of claim 18.

29. (Currently Amended) A coded bitstream having portions of the bitstream encoded using different encoders according to encoder models associated with [[the]] a subject matter of each portion of the bitstream, the coded bitstream encoded according to the method of claim 21.